

NITROGEN (FIXED)—AMMONIA STATISTICS

by Carl A. DiFrancesco and Deborah A. Kramer

{All values in metric tons (t) unless otherwise noted}

Year	Production	Imports	Exports	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1943	406,000		1,000		405,000			
1944	405,000		2,700		403,000			
1945	409,000	3,000	3,000		409,000			
1946	541,000	5,000	4,000		542,000			2,380,000
1947	831,000		4,000		827,000			3,330,000
1948	813,000	156,000	2,000		967,000			3,950,000
1949	965,000		1,000		964,000			4,560,000
1950	1,170,000		7,000		1,160,000	69.8	472	4,810,000
1951	1,330,000		5,000		1,320,000	72.5	456	5,240,000
1952	1,530,000		11,000		1,520,000	73.4	450	5,300,000
1953	1,710,000		11,300		1,690,000	78.8	480	6,450,000
1954	2,040,000		29,300		2,010,000	78.8	478	7,300,000
1955	2,430,000		33,000		2,390,000	77.0	470	8,070,000
1956	2,520,000	19,000	39,800		2,500,000	68.0	407	8,620,000
1957	2,780,000		50,700		2,730,000	76.1	440	9,270,000
1958	2,890,000		49,000		2,850,000	76.1	430	10,800,000
1959	3,370,000	40,000	63,000		3,350,000	77.9	435	11,800,000
1960	3,590,000		81,000		3,510,000	83.4	458	12,900,000
1961	3,890,000		76,000		3,810,000	83.4	453	14,000,000
1962	4,340,000		44,300		4,290,000	83.4	448	11,900,000
1963	4,990,000	13,000	56,100		4,950,000	83.4	444	17,100,000
1964	5,700,000	118,000	111,000	490,000	5,700,000	83.4	439	19,400,000
1965	6,620,000	152,000	138,000	519,000	6,600,000	83.4	430	21,800,000
1966	7,910,000	231,000	169,000	491,000	8,000,000	83.4	419	25,000,000
1967	9,100,000	330,000	323,000	1,390,000	8,210,000	76.1	371	28,700,000
1968	9,040,000	298,000	595,000	1,190,000	8,950,000	68.9	323	32,100,000
1969	9,540,000	333,000	835,000	983,000	9,240,000	45.3	201	35,900,000
1970	10,300,000	361,000	727,000	1,070,000	9,880,000	51.7	217	38,800,000
1971	10,900,000	344,000	369,000	1,240,000	10,700,000	50.7	204	41,100,000
1972	11,300,000	288,000	530,000	1,190,000	11,100,000	54.4	212	43,000,000
1973	11,300,000	246,000	672,000	640,000	11,500,000	70.2	258	46,700,000
1974	11,700,000	338,000	296,000	849,000	11,600,000	156	516	48,400,000
1975	12,200,000	601,000	262,000	1,540,000	11,900,000	168	509	49,500,000
1976	12,500,000	543,000	327,000	1,680,000	12,500,000	168	481	56,900,000
1977	13,200,000	802,000	314,000	2,060,000	13,400,000	118	317	62,000,000
1978	12,800,000	1,130,000	394,000	1,490,000	13,800,000	74.3	186	67,200,000
1979	13,900,000	1,450,000	587,000	1,340,000	14,900,000	118	265	71,100,000
1980	14,700,000	1,740,000	618,000	1,340,000	16,000,000	111	220	73,600,000
1981	14,200,000	1,560,000	459,000	1,790,000	14,900,000	120	215	77,000,000
1982	11,800,000	1,580,000	553,000	1,790,000	12,800,000	106	179	75,900,000
1983	10,200,000	1,970,000	270,000	1,290,000	12,400,000	161	263	80,400,000
1984	12,500,000	2,450,000	397,000	1,550,000	14,400,000	131	206	88,600,000
1985	12,900,000	2,090,000	916,000	1,630,000	14,000,000	150	227	91,000,000
1986	10,800,000	1,860,000	482,000	1,370,000	12,400,000	65.2	97	91,100,000
1987	12,000,000	2,140,000	769,000	955,000	13,800,000	94.7	136	95,100,000
1988	12,500,000	2,750,000	582,000	925,000	14,700,000	133	183	99,300,000
1989	12,300,000	2,860,000	346,000	849,000	14,900,000	78.8	104	99,300,000
1990	12,700,000	2,670,000	482,000	797,000	14,900,000	106	132	97,500,000
1991	12,800,000	2,740,000	580,000	936,000	14,800,000	106	127	93,800,000
1992	13,400,000	2,690,000	354,000	1,060,000	14,600,000	139	161	93,400,000
1993	12,600,000	2,660,000	378,000	852,000	15,000,000	131	148	91,600,000
1994	13,300,000	3,450,000	215,000	956,000	16,400,000	235	258	93,800,000

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Year	Production	Imports	Exports	Stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1995	13,000,000	2,630,000	319,000	959,000	15,300,000	197	211	100,000,000
1996	13,400,000	3,390,000	435,000	881,000	16,200,000	217	226	103,000,000
1997	13,300,000	3,530,000	395,000	1,530,000	16,400,000	118	120	104,000,000
1998	13,800,000	3,460,000	614,000	1,050,000	17,100,000	88.8	88.8	105,000,000

Nitrogen (fixed)—Ammonia Worksheet Notes

Data Sources

The sources of data for the nitrogen (fixed)—ammonia worksheet were the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and Minerals Facts and Problems (MFP). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data were not available. Data were for Nitrogen content except where noted.

Production

Production data for ammonia (nitrogen content) in the United States were for anhydrous ammonia, excluding coke byproducts and aqueous ammonia when possible. Data were from the MYB.

Imports

Import data reported the amounts of ammonia (nitrogen content) imported into the United States. Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1942-44, 1947, 1949-55, 1957-58, and 1960-62.

Exports

Export data reported the amounts of ammonia (nitrogen content) exported from the United States. Data for the years 1958-62 were for both industrial chemical and fertilizer ammonia. Data were from the MYB.

Stocks

Stocks data reported the amount of ammonia (nitrogen content) held in stocks. Data were from the MFP for the years 1964-76 and the MYB for the years 1977-98. Blank cells in the worksheet indicate that data were not available for the years 1943-63.

Apparent Consumption

Apparent consumption was estimated for the years 1943-98, by using the formula: Apparent consumption = Production + Imports – Exports ± Changes in stocks.

Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of ammonia (nitrogen content) apparent consumption. Unit value was estimated for the United States in actual dollars by using price data “delivered east of the Rockies” for 1950-77, and “Gulf Coast prices” for 1978-98. Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1943-49.

Unit Value (98\$/t)

Dividing the consumer price index conversion factor with 1998 as the base year into the “Unit Value,” determined previously, results in unit value in constant 1998 U.S. dollars. Blank cells in the worksheet indicate that data were not available for the years 1943-49.

World Production

World production data were for ammonia produced. Data for 1946-57 were for “fertilizer nitrogen compounds,” and were reported as production years (July 1-June 30), not the calendar year. Blank cells in the worksheet indicate that data were not available for the years 1943-45. Data were from the MYB.

References

U.S. Bureau of Mines, 1943-96, Minerals Yearbook, 1941-94.
———1976, Mineral Facts and Problems, 1975 ed., U.S. Bureau of Mines Bulletin 667.
———1980, Mineral Facts and Problems, 1980 ed., U.S. Bureau of Mines Bulletin 671.
U.S. Geological Survey, 1997-2000, Minerals Yearbook, v. 1, 1995-98.

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